






UTAH PRAIRIE DOG OCCUPANCY AND HABITAT SURVEY PROTOCOL FOR FEDERAL SECTION 7 CONSULTATIONS




BLM Photo by Rebecca Bonebrake

1-2 MAY 2012
CEDAR CITY, UTAH







Introduction




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Purpose: Determine if Utah prairie dogs inhabit, or ever have inhabited, a proposed project area.



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Introduction



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Why/What info are we trying to obtain?

- ☐ To be in compliance with the Endangered Species Act.
- ☐ Determine the status of Utah prairie dogs and their habitat in relation to a proposed project.
- ☐ Provide information necessary to devise and implement actions that will avoid and/or minimize impacts to Utah prairie dogs.

Introduction



BLM Photo by Rebecca Bonobake

Adaptability

- Our knowledge is continuously developing and changing.
- This protocol is a work in progress and will be modified as new information becomes available.
- Special conditions might dictate that surveys be conducted differently in rare instances.
- Any deviation from the approved survey protocol **MUST** be approved by Utah Ecological Services Field Office **AND** the Authorizing Federal Agency prior to survey activity.

Surveyor Qualifications

- All Surveyors must be certified.
- Certified = Successful completion of a USFWS approved UPD Training.
- Survey results from non-certified surveyors will not be used for assessing impacts to UPD's.

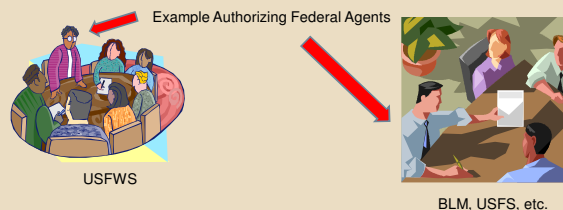
Surveyor Qualifications

- Successfully complete training course every four years.
- Protocol changes may require early re-certification.
- Must carry training cards when surveying.



Pre-Survey Coordination

Prior to conducting surveys **Certified Surveyors must** coordinate with the **Authorizing Federal Agency**



Authorizing Federal Agency

□ For projects on federal lands; the authorizing agency is the agency which administers the lands where the proposed project occurs and from whom a permit or other authorization is needed before the project may be implemented.

□ Examples of **Authorizing Federal Agencies**:
BLM, USFS, NPS

Authorizing Federal Agency

□ If the **authorizing federal agency** is not a land management agency, coordinate all survey details with the U.S. Fish and Wildlife Service.

□ For projects on private lands with a **federal nexus**, the **authorizing federal agency** is the federal agency connected to the private lands action.

What's a Federal Nexus???



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A. A newly discovered galaxy.

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- A. A newly discovered galaxy.
- B. A hair-care product.

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- D. A luxury sedan.

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Federal Nexus:

A “federalized” project is one for which the agency has discretion to authorize or permit the action, or proposes to contribute substantial funds, equipment or staff to implement.

To Determine Authorizing Agency:

Ask Yourself:

1. Does the project involve private, state, or **federal** lands?
2. Does the project have any **federal** funding or permits?
3. Is this a private or **federally sponsored** project?

What is an Action Area?

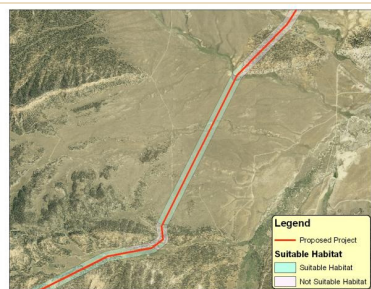
ACTION AREA:

- The entire right-of-way or exterior boundary of a proposed action plus the appropriate **Buffer Type:**
 - **350-foot buffer** for projects that do not permanently alter habitat extending from the proposed project footprint.
 - **½ mile buffer** for projects that may permanently alter or substantially impact habitat, or include surface occupancy, extending from the proposed project footprint.

What's my buffer?

The **buffer type** will be determined by the **authorizing federal agency** in coordination with the U.S. Fish and Wildlife Service.

Action Area Example:



How large of a buffer?



Photos by Transcon Environmental



Rules for Private Land Access:

Private Land Access:

- Written permission from the legal landowner or lessee is required to legally access privately owned lands.
- If access cannot be obtained to privately owned lands in the Action Area, the surveyor must use other accessible vantage points, optics, aerial photos, audio cues, other technology, and interviews of knowledgeable land managers and agency biologists to assess prairie dog occupancy and extent of suitable habitat.

Rules for Private Land Access:

Private Land Access:

- If other survey methods are not available on inaccessible private lands or do not provide adequate data for the federal authorizing agency to make a conclusive decision concerning occupancy, **then the inaccessible land in question must be assumed occupied by Utah prairie dogs.**

Summary/Key Points:

1. Prior to conducting surveys, certified surveyors must coordinate with the authorizing federal agency of the land parcel.

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2. A project that occurs on private land, but is being funded by a federal agency, requires Section 7 consultation.
3. The Action Area is defined as "the entire right-of-way or exterior boundary of a proposed action plus the appropriate Buffer Type."

Summary/Key Points:

1. Prior to conducting surveys, certified surveyors must coordinate with the authorizing federal agency of the land parcel.
2. A project that occurs on private land, but is being funded by a federal agency, requires Section 7 consultation.
3. The Action Area is defined as "the entire right-of-way or exterior boundary of a proposed action plus the appropriate Buffer Type."
4. The two sizes of project buffers, based on project type, are 350' and ½ mile.

Summary/Key Points:

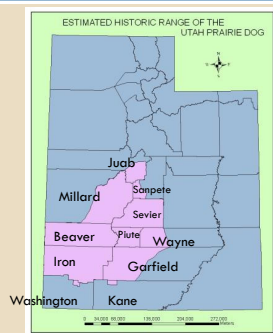
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4. The two sizes of project buffers, based on project type, are 350' and ½ mile
5. If written permission from the legal landowner or lessee to access privately owned lands cannot be obtained to conduct a survey, the area must be assumed to be occupied by Utah prairie dogs.

What must be surveyed?

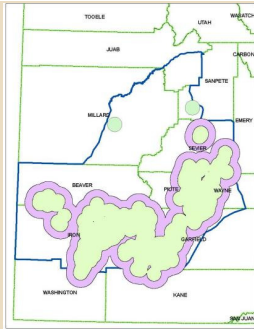
The U.S Fish and Wildlife Service requires surveys of all suitable habitat within the historic range of the Utah prairie dog



What must be surveyed?



Surveys required **within buffers**; agency discretion outside of buffers
(summer 2010 clarification)



Blue line = historic range

Green lines = county boundaries

Green polygon = 5 mile
buffer = high intensity
surveys

Purple polygon = 10 mile
buffer = low intensity
surveys

What must be surveyed?

The U.S Fish and Wildlife Service requires surveys of all **suitable habitat** within the buffers



BLM/Photo by Rebecca Bonebrake

Suitable Habitat



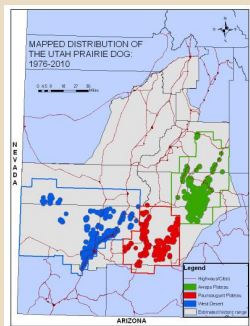
BLM/Photo by Rebecca Bonebrake

Habitat capable of supporting Utah prairie dogs includes:

- grassland or low density sagebrush sites
- agricultural fields
- vacant lots
- other areas as identified by the authorizing Federal agency.

Habitat previously mapped by the Utah Division of Wildlife Resources/BLM/FS must be treated as suitable, (and must be surveyed) regardless of current vegetative status.

Mapped habitat since 1976



Unsuitable Habitat



Unsuitable habitat is so obvious that it does not need to be surveyed or mentioned further.
FALSE

Any habitat that you think is unsuitable must be documented as to why (shrub canopy cover transects, soil survey data, etc) and must be mapped as unsuitable.

Otherwise, survey it!

Suitable habitat examples

Sagebrush habitat/Public rangelands

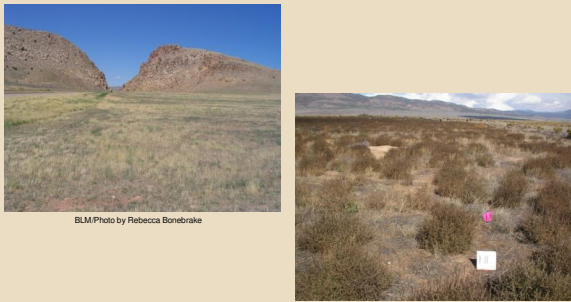


BLM/Photos by Rebecca Bonebrake



Suitable habitat examples

Weedy Rangelands




BLM Photo by Rebecca Bonebrake

Photo by Cirrus Ecological Solutions, LC

Suitable habitat examples


Public Rangelands



BLM Photos by Rebecca Bonebrake

Suitable habitat examples

Recreation Areas



Bryce Canyon National Park/Photo by Sarah Haas

Suitable habitat examples

Ponderosa Pine Parks



US Forest Service/Photo by Jake Schoppe

Suitable habitat examples

Agricultural Fields



UDWR Photo

Suitable habitat examples

Sagebrush habitat/Private lands



UDWR Photo

Suitable habitat examples

Agricultural Fields



UDWR Photo

Suitable habitat examples

Undeveloped/abandoned lands



UDWR Photo

Suitable habitat examples


Urban Areas



UDWR Photo

Suitable habitat examples

Grassland/ Pasture/Private lands



UDWR Photo

Survey Season

- Active Season – April 1 through August 31
 - Ground must be snow free.
- Dormant season – September 1- March 31
 - Ground must be snow free.

The Authorizing Federal Agency will determine applicable season.

Dormant Season Surveys

- When not to survey during dormant season?
 - Final decision to be made by the Authorizing Federal Agency
 - Site conditions may not be conducive to accurate and reliable dormant season surveys
 - Large project areas
 - Weather conditions: snow or mud
 - Presence of many burrows and/or species of burrowing mammals

Summary/Key Points:

1. Previously mapped Utah prairie dog habitat needs to be surveyed, even if it doesn't look suitable anymore.

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2. Utah prairie dogs occur in a variety of habitats, including colonization of areas in and among trees.

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1. Previously mapped Utah prairie dog habitat needs to be surveyed, even if it doesn't look suitable anymore.
2. Utah prairie dogs occur in a variety of habitats, including colonization of areas in and among trees.
3. Even if an area has been previously mapped by the Utah Division of Wildlife Resources as prairie dog habitat, you are required to survey for Utah prairie dogs.

Habitat Assessment Survey

This protocol will be applied to 100% of
Suitable Habitat






BLM Photo by Rebecca Bonebrake

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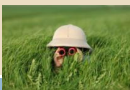
How do I do this?



There are two types of surveys:

- (1) **Low Intensity Level Surveys**
- (2) **High Intensity Level Surveys**

How do I do this?



(1) Low Intensity Level Surveys:

- Surveys of suitable habitat that are intended to identify any previously unknown Utah prairie dog habitat areas.
- Generally conducted in locations ≥ 5 miles from any known and/or mapped Utah prairie dog habitat where previous surveys or professional knowledge of the local management biologists indicate that the likelihood of occupied prairie dog habitat is low.

How do I do this?



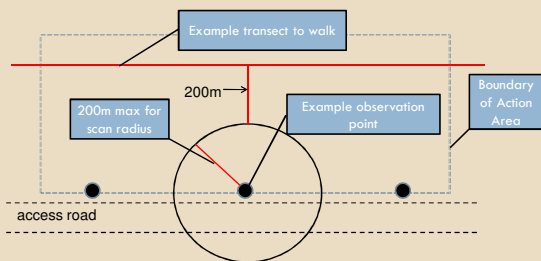
(1) Low Intensity Level Surveys Methods:

1. 100% visual coverage - All suitable habitat in the Action Area must be surveyed by foot and/or vehicle.
2. Aerial methods are not allowed.
3. Vehicle surveyors must:
 - stop every 1/4 mile (400 m), or more frequently
 - exit vehicle and scan surrounding areas, listen for vocalizations 🦘
 - scans should not attempt to clear more than 200m in either direction
 - The surveyor should spend a minimum of 5 minutes at each observation point

How do I do this?



For Example...



How do I do this?



(1) Low Intensity Level Surveys Methods:

4. If no Utah prairie dogs or their sign are observed within the entire Action Area, the results of the Low Intensity Level survey will be considered valid for two years from the following March 31

For Example: If a survey is completed May 15, 2012, the survey is valid until March 31, 2015

5. If any Utah prairie dogs or their sign are observed anywhere within the Action Area during the Low Intensity Level Survey, then **High Intensity Level Surveys** will be required in those areas.

How do I do this?



(2) High Intensity Level Surveys:

- Surveys of suitable habitat intended to identify the extent of Utah prairie dog habitat in areas suspected of containing Utah prairie dogs.
- Generally conducted within <5 miles of known and/or mapped Utah prairie dog habitat areas where previous surveys or professional knowledge of the local management biologists indicate that occupied prairie dog habitat may occur.

How do I do this?



(2) High Intensity Level Surveys Methods:

1. All (100%) suitable habitat in the Action Area must be surveyed.
2. The surveyor must walk parallel transects no more than 30 meters apart through the entire area of suitable habitat searching 15m on both sides of the transect for burrows and other prairie dog sign. Surveyors must walk transects using a compass or GPS unit for orientation, ensuring that all suitable habitat within the entire action area is adequately surveyed. Care must be taken as to not trample burrows.

How do I do this?



(2) High Intensity Level Surveys Methods:


3. Surveyors must stop periodically and scan surrounding areas with suitable optics for the presence of prairie dogs. The surveyor must also listen for Utah prairie dog vocalizations throughout the survey to locate prairie dogs. 🗣️
4. The results of the High Intensity Level survey are only valid from the date conducted through to the following March 31

For Example: If a survey is completed May 15, 2012, the survey is valid until March 31, 2013

If a project is not implemented until after the following March 31, and/or if there are gaps in construction activity within the same year (generally one week or more), new surveys may be required.

UPD Habitat Classification

Portions of suitable habitat that support Utah prairie dog burrows, mounds or other sign of the presence (past or recent) of Utah prairie dogs are considered "Utah prairie dog habitat".



BLM/Cedar City Field Office Photo

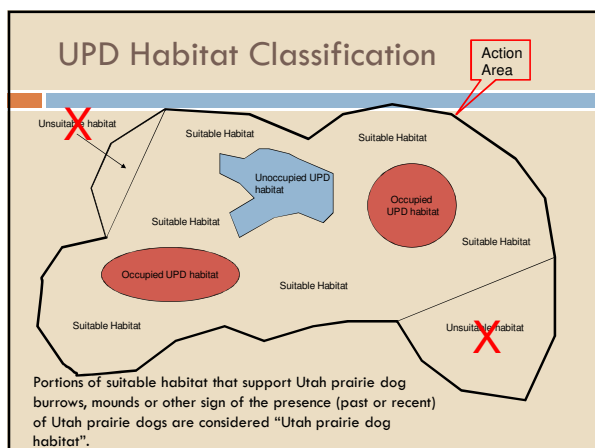
UPD Habitat Classification

Utah prairie dog habitat will be classified as **unoccupied** or **occupied**.

Unoccupied = evidence that Utah prairie dogs once occupied the site, but no conclusive evidence of current occupancy (No time frame is specified)

Occupied = evidence of current occupancy

UPD Habitat Classification



Portions of suitable habitat that support Utah prairie dog burrows, mounds or other sign of the presence (past or recent) of Utah prairie dogs are considered "Utah prairie dog habitat".

Unoccupied Utah Prairie Dog Habitat

Active Season :

- Functional Utah prairie dog burrows or mound systems are found but there is no evidence of prairie dogs = No Utah prairie dogs seen or heard, no fresh digging, no scat or tracks

OR

- Utah prairie dog burrows are found but are not Functional

Unoccupied Utah Prairie Dog Habitat

Dormant Season:

Because Utah prairie dogs hibernate, the "Unoccupied" habitat classification cannot be applied to dormant season surveys.

Any Utah prairie dog burrows found (functional or not functional), or any evidence of a prairie dog mound system, must be documented and will be assumed to be occupied.

Occupied Utah Prairie Dog Habitat

Active Season :

- Utah prairie dogs are seen or heard

OR

- Functional Utah prairie dog burrows are found and show evidence of recent prairie dog activity (fresh digging, scat, fresh tracks).



BLM/Cedar City Field Office Photo

Occupied Utah Prairie Dog Habitat

Dormant Season:

- Utah prairie dog burrows (functional or not functional) or mound systems are found, even if no other signs of Utah prairie dogs are present.

In other words, any area with Utah prairie dog sign must be classified as occupied during the Dormant Season.

Functional Burrow Definition

- Functional burrow: Any Utah prairie dog burrow that is structurally suitable to house Utah prairie dogs (entirely open, partially filled with dirt, or open but blocked by sticks, weeds, cobwebs, or other debris).
- Burrows that are less than 3" in diameter are not considered potential prairie dog burrows.

Occupied Habitat/Functional Burrow



BLM/Photos by Rebecca Bonebrake

Shows recent activity



(Occupied Habitat/Active Season)

Occupied Habitat/Functional Burrow



BLM/Photos by Rebecca Bonebrake



(Occupied Habitat/Active Season)

Functional Burrow Definition cont.

- Whenever a surveyor is uncertain of the species of origin when identifying burrows or mounds, they **MUST** err on the side of the Utah prairie dog and report the site. Follow-up visits may be made at any time by the U.S. Fish and Wildlife Service, Utah Division of Wildlife Resources, and/or the Authorizing Federal Agency to verify the species.



Functional Burrow Definition cont.

- The species of origin (the species that originally dug the burrow or created the mound) and the current occupant of the burrow may not be the same.



BLM/Photo by Rebecca Bonebrake

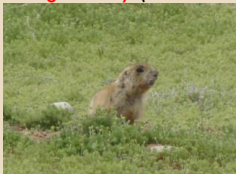
Occupied Utah Prairie Dog Habitat

Active Season :

- Utah prairie dogs are seen or heard

OR


- Functional Utah prairie dog burrows are found and show evidence of **recent prairie dog activity** (fresh digging, scat, fresh tracks).



BLM/Photo by Roger Pretti

Occupied Utah Prairie Dog Habitat



Evidence of recent prairie dog activity (**fresh digging**, scat, fresh tracks).



BLM/Photo by Rebecca Bonebrake

Occupied Utah Prairie Dog Habitat


Evidence of recent prairie dog activity (fresh digging, **scat**, fresh tracks).

UDWR Photo BLM/Photo by Rebecca Bonebrake

Occupied Utah Prairie Dog Habitat

Evidence of recent prairie dog activity (fresh digging, **scat**, fresh tracks).




BLM/Photos by Rebecca Bonebrake

Break scat open to determine freshness

Occupied Utah Prairie Dog Habitat

Evidence of recent prairie dog activity (fresh digging, **scat**, fresh tracks).



BLM/Photos by Rebecca Bonebrake

Not all burrows will have scat!

Occupied Utah Prairie Dog Habitat

Evidence of recent prairie dog activity (fresh digging, scat, **fresh tracks**).



BLM/Photos by Rebecca Bonebrake

Occupied Utah Prairie Dog Habitat

Evidence of recent prairie dog activity (fresh digging, scat, **fresh tracks**).



UDWR Photo by Adam Kavalunas



BLM Photo by Rebecca Bonebrake

Functional Burrow



UDWR Photo

Dormant Season: Occupied

Active Season: is there fresh sign? Yes, then occupied



BLM Photo by Rebecca Bonebrake

Mound System:

- A mound is the pile of earth, gravel, sand, rocks, or debris associated with making a burrow hole in the ground.
- A Utah prairie dog mound system is identified as 3 or more prairie dog mounds clustered within a 10m diameter space.
- If any evidence of a Utah prairie dog mound system is found, the area must be mapped and reported as Utah prairie dog habitat.

Mound System:

- Whenever a surveyor is uncertain of the species of origin when identifying burrows or mounds, they **MUST** err on the side of the Utah prairie dog and report the site.
- Follow-up visits may be made at any time by the USFWS, UDWR, and/or the Authorizing Federal Agency to verify the species.
- Note: The species of origin (the species that originally dug the burrow or created the mound) and the current occupant of the burrow may not be the same.

Mound System:



BLM/Photo by Rebecca Bonebrake

Summary/Key Points:

1. With High Level Intensity Surveys, all (100%) suitable habitat in the Action Area must be surveyed, the surveyor must walk parallel transects no more than 30 meters apart through the entire area of suitable habitat searching 15m on both sides of the transect for burrows and other prairie dog sign, and surveyors must stop periodically and scan surrounding areas with suitable optics for the presence of prairie dogs.

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2. Utah prairie dog habitat, found during a Section 7 protocol level survey, is classified as either "occupied" or "unoccupied."

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2. Utah prairie dog habitat, found during a Section 7 protocol level survey, is classified as either "occupied" or "unoccupied."
3. Surveyors only need to map occupied and unoccupied Utah prairie dog habitat.

Summary/Key Points (cont):

4. Suitable and unsuitable habitat cannot always be determined from aerial photos.

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5. Utah prairie dog habitat cannot be classified as "unoccupied" during the dormant season.

Summary/Key Points (cont):

4. Suitable and unsuitable habitat cannot always be determined from aerial photos.
5. Utah prairie dog habitat cannot be classified as "unoccupied" during the dormant season.
6. During the active season, it is not necessary to see a Utah prairie dog in order to determine whether or not an area is occupied Utah prairie dog habitat.

Other wildlife one might see


Ground squirrels: roughly half the size, and usually grayish in color, calls are higher pitched than prairie dogs, usually more timid in nature, typically do not create well established mounds



UDWR Photo

Ground Squirrel Burrows


Usually about half the size of prairie dog burrows.



UDWR Photo

Ground squirrel burrows

←→



UPD burrow

→

BLM/Photos by Roger Pretti

Who lives here?



BLM/Photo by Roger Pretti

Ground squirrel or prairie dog?




Photo by Dean Draper



Photo by Bruce Bonebrake

Other wildlife one might see


Burrowing Owls – can be found in occupied or unoccupied colonies



BLM/Cedar City Field Office photo

Other wildlife one might see



Pygmy rabbit: smallest rabbit in North America.



UDWR/Photo by Lynn Chamberlain

Pygmy Rabbit Burrows

Usually found at the base of big sagebrush in the most dense and tallest stands.

BLM/Photos by Rebecca Bonebrake

Pygmy Rabbit Scat



BLM Photo by Rebecca Bonebrake

Other wildlife one might see

Pocket Gopher



BLM Photo by Rebecca Bonebrake

Other wildlife one might see

Badger



BLM Cedar City Field Office

Other wildlife one might see

Black Widow Spider



BLM Photo by Rebecca Bonebrake

Other wildlife one might see

You will likely see many burrows. Remember, single or isolated burrows are not "Utah prairie dog habitat".



BLM Photo by Rebecca Bonebrake

UPD Counts

Parameters

- Ground is snow free
- Calm/sunny day, <40% cloud cover
- Winds <3 (12mph) on Beaufort scale
- Avoid extremes of heat and cold
- Between 8:00am and 6:00pm

UPD Count Techniques

- Count from an unobstructed vantage point
- Count from multiple vantage points if needed.
- Binoculars, spotting scopes, vocalizations
- Take care not to overlap counts
- Count minimum of 3 times, recording highest count.

UPD Count Techniques

- Avoid disturbing UPD's if possible
- Habituated UPDs will often re-surface after initial disturbance
- Non-habituated UPD's – approach cautiously, count immediately, re-count, move closer

UPD Habitat Mapping

- The surveyor must determine the perimeter of all Utah prairie dog habitat encountered, whether occupied or unoccupied. The perimeter burrow locations will be used to define the boundary of all Utah prairie dog habitat polygons. The surveyor shall assign each Utah prairie dog habitat polygon a unique Polygon ID # (see glossary).
- All data pertaining to a polygon and recorded on the Survey Data Form and subsequent GIS attribute data will be referenced by its unique Polygon ID#.

UPD Habitat Mapping

- All survey results will be provided to the authorizing agency as an ESRI compatible product (shapefile or personal Geodatabase) in NAD 1983 UTM Zone 12 North datum. Spatial data must be attributed in a table (see Table 1 for example attribute table) and include metadata following ESRI standards.

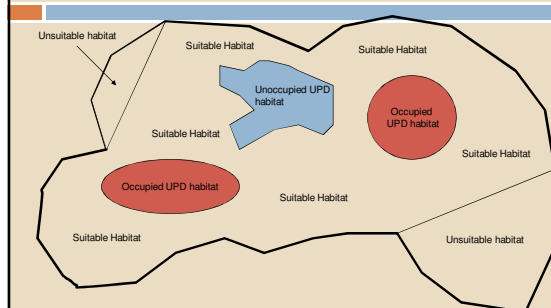
UPD Habitat Mapping

- What to map
 - All Utah prairie dog habitat, occupied or unoccupied.
- How to map
 - With your GPS unit set in polygon mode, circumscribe the habitat unit by walking around the perimeter burrows.

OR

 - Record point locations for each perimeter burrow and create a polygon therefrom.

UPD Habitat Classification



UPD Habitat Mapping

- Required data
 - Unique Polygon ID Numbers
 - Attribute Tables
 - GIS data in NAD 1983 UTM Zone 12 North datum
 - Metadata
 - Remember to coordinate with the Authorizing Federal Agency!

Data & Report Submission

- Survey data must be provided:
 - in the approved format
 - within an appropriate timeframe
- The authorizing federal agency:
 - may accept, reject, or ask for additional information*
 - will coordinate results with USFWS
 - is responsible for providing copies of data to UDWR



*Results can be subject to validation by the USFWS and/or Authorizing Federal Agency

Data & Report Submission

- Complete data/report submission includes:
 - a written report summarizing methodology and results
 - completed survey forms, maps and geospatial data
 - clear indication where low vs high intensity level survey performed
 - clear indication where vehicle vs foot survey performed within low intensity survey areas
 - clear indication of the action area, all suitable habitat that was surveyed, and the presence of all Utah prairie habitat areas (occupied and unoccupied)



Data & Report Submission



- ❑ Complete data/report submission includes:
 - ❑ both positive and negative survey results:
 - Negative data = all areas in the Action Area that were determined to be unsuitable habitat; and suitable habitat that was surveyed but showed no evidence of Utah prairie dogs or their burrows.
 - Survey forms submitted with negative data only need the top portion of the form completed.

Here it is...the Data Sheet!

[illegible]

Useful Definitions:

The **Polygon ID number** is a unique identifier for each Utah prairie dog habitat polygon that is defined by the surveyor and provides a means to link the spatial data of that polygon with the data captured on the survey form.

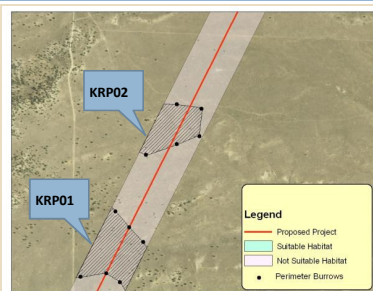
Polygon Status indicates whether Utah prairie dog habitat polygons are classified as **occupied** or **unoccupied**.

Example attribute table for Polygon shapefile

Polygon ID #	Surveyor	Land Use	Status	Total # of UPDs	Date of Survey
KRP01	J. Cliff; S. Rubt	US	Unoccupied	0	5/18/2010
KRP02	S. Liner; B. Box	RP	Occupied	8	5/18/2010
KRP03	J. Cliff; K. Kirken	DC	Occupied	14	5/18/2010
KRP04	K. Kirken; B. Box	IP	Unoccupied	0	5/18/2010
KRP05	S. Liner; B. Box	IC	Unoccupied	0	5/18/2010
KRP06	S. Liner; B. Box	BG	Unoccupied	0	5/19/2010
KRP07	B. Box; R. Sunner	US	Unoccupied	0	5/19/2010

Polygon Examples

(within action area/within suitable habitat)



Let's do an example!!

Utah Prairie Dog Occupancy / Habitat Survey Form

Project Name: _____ Start Survey Date: _____

Project Location: T _____ R _____ Section(s): _____ to _____ County: _____

Address of Suitable Habitat surveyed to: Address: _____ Buffer Type (check one): ☐ 100' buffer ☐ 1/4 mile buffer

Surveyor(s): _____ Survey Season (check one): ☐ Active Season ☐ Dormant Season

Location Description: _____ Surveyor Organization/Agency: _____

Comments: _____

Site Specific Information (fill out the information below only when Utah prairie dog habitat has been identified or is suspected)

Polygon ID #	Polygon Status	Start Date	End Date	Functional Burrows	Mounds	Vocalizations	Scat	Tracks	Chasing	UPD Count (Total #)	UPD Count (Known)	UPD Count (Suspected)	Notes
KRP02	Occupied	14:25		Y	Y	N	Y	N	Y	8	1	2	Badger in area, monoculture of alfalfa

NOTES: If you use UPD habitat polygons, note presence of other prairie dog signs (e.g., known, and habitat description)

Agency Use Only

Reviewed: _____ Date: _____

Approved: _____ Date: _____

Comments: _____

Source: _____

Hints for Data Sheet Success!

- **Buffer Type:** Consult with the **Authorizing Federal Agency**
- UTM coordinates are in NAD 83 UTM Zone 12 North :
 - E = Easting, 6 digits
 - N = Northing, 7 digits
- Survey Seasons:
 - **Active Season** = April 1 – August 31
 - **Dormant Season** = September 1 – March 31
- Start Time - use military time (i.e. 0900, 1600)
- UPD Counts = Number of prairie dogs observed: boys and girls, big and small!
- Other Species: burrowing owl, pygmy rabbit, other or unknown
- DO NOT SURVEY IF CLOUD COVER >40%
- DO NOT SURVEY IF WIND SPEED >12 mph

Summary/Key Points:

1. Counts of Utah prairie dogs can be conducted when all parameters are met: ground is snow free, calm/sunny day with <40% cloud cover, winds <3 (12mph) on Beaufort scale, heat and cold extremes are avoided, counts are conducted between 8:00am and 6:00pm

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6. Complete data/report submission includes positive and negative data.

Enjoy your surveys!!



Bryce Canyon National Park Photo

Any Questions?
